IN THE CLAIMS

Please amend the claims as follows:

1. (original) A method of interpolating sample values (f) of samples (Pi, Pot) of an image, the method comprising:

determining (1) a direction of a local gradient (θ) of the sample values (f) for a particular one of the samples (Pi,Pot) from sample values (f) neighboring the particular one of the samples (Pi, Pot),

selecting (20) a position of interpolator input values (ai) in the direction of the local gradient (θ) of the particular one of the samples (Pi, Pot),

interpolating (21) the interpolator input values (ai) for the particular one of the samples (Pi,Pot) from sample values (f) neighboring the interpolator input values (ai), and

determining (22) in a single step a warping factor (A) for a warped distance interpolator (3) using the interpolator input values (ai).

2. (original) A method of interpolating sample values (f) of samples (Pi, Pot) of an image as claimed in claim 1, wherein:

an output image (OI) is interpolated from an input image (II) in a system for digitally scaling the input image (II) with input

samples (Pi) having input sample values to obtain the output image (OI) with output samples (Po),

the method further comprises interpolating (10) the input sample values to obtain interpolated temporary output samples (Pot) having temporary output sample values (I'(m,n)),

the determining (1) the direction of the local gradient (θ) is arranged for determining a direction of the local gradient (θ) for each one of the output samples (Po) from neighboring temporary output sample values (I'(m,n)).

3. (original) A method of interpolating sample values (f) of samples (Pi, Pot) of an image as claimed in claim 1, wherein:

an output image (OI) is interpolated from an input image (II) in a system for digitally scaling the input image (II) with input samples (Pi) to obtain the output image (OI) with output samples (Po),

the determining (1) the direction of the local gradient (θ) is arranged for determining (15) a direction of the local gradient (θ) for each one of the input samples (Pi) from neighboring input sample values to obtain input sample gradient values, and

the method further comprises mapping (16) of the input sample gradient values to output gradient values of the output samples (Po), wherein the corresponding one of the output gradient values is used

as the local gradient (θ) of the particular one of the samples (Pi, Pot).

4. (original) A method of interpolating sample values (f) of samples (Pi, Pot) of an image as claimed in claim 2, wherein the input samples (Pi) and the output samples (Po) are arranged in a matrix comprising rows of pixels in an x direction and columns of pixels in a y direction, the determining (1) the direction of the local gradient (θ) comprises a first Sobel filtering (11) of the temporary output samples (Pot) in the x direction and a second Sobel filtering (12) in the y direction, the local gradient (θ) of the output samples (Po) being the arctangent of the second Sobel filtering (12) divided by the first Sobel filtering (11).

5. (currently amended) A method of interpolating sample values (f) of samples (Pi, Pot) of an image as claimed in claim 2~~ or 3~~, wherein a distance (d) between adjacent interpolator input values (ai) is substantially equal to a distance between adjacent input samples (Pi).

6. (currently amended) A method of interpolating sample values (f) of samples (Pi, Pot) of an image as claimed in claim 2~~ or 3~~, wherein:

the input samples (Pi) and the output samples (Po) are arranged in a matrix comprising rows of pixels in an x direction and columns of pixels in a y direction, and

the determining (22) a warping factor (A) comprises projecting (30) the warping factor (A) on a x and y axis to obtain first and second warping components (Ax, Ay), respectively, and an interpolator (32) for interpolating the input samples (Pi) with modified distances determined by the first and second warping components (Ax, Ay).

7. (original) A warped distance interpolator for interpolating sample values (f) of samples (Pi, Pot) of an image, said interpolator comprising:

means for determining (1) a direction of a local gradient (θ) of the sample values (f) for a particular one of the samples (Pi, Pot) from sample values (f) neighboring the particular one of the samples (Pi, Pot),

means for selecting a position (20) of interpolator input values (ai) in the direction of the local gradient (θ) of the particular one of the samples (Pi, Pot),

means for interpolating (21) the interpolator input values (ai) for the particular one of the samples (Pi, Po) from pixel values (f) neighboring the interpolator input values (ai), and

means for determining (22) in a single step a warping factor (A) for a warped distance interpolator (3) using the interpolator input values (ai).

8. (original) A display apparatus comprising the warped distance interpolator (3) of claim 7, and a display screen (DS).